

Patent Abstracts of Japan

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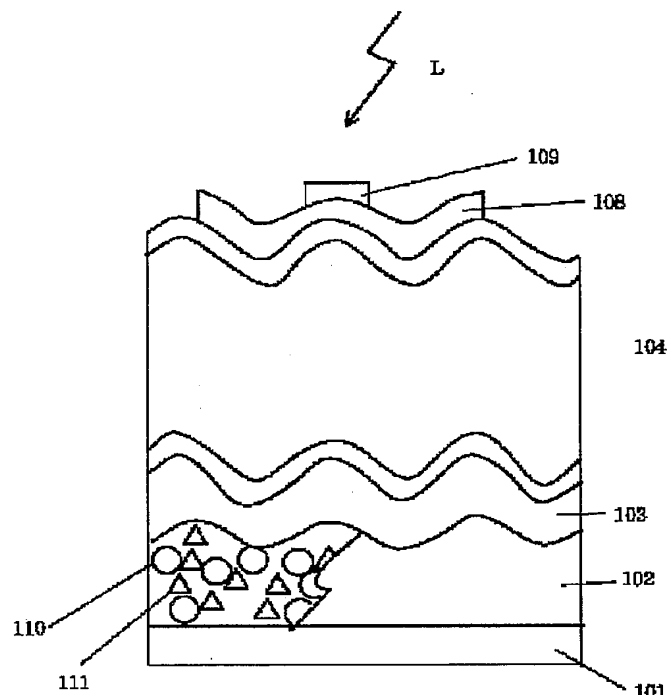
APPLICATION DATE : 28-12-92
APPLICATION NUMBER : 04361498

APPLICANT : CANON INC;

INVENTOR : TOYAMA JO;

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TITLE : THIN FILM SEMICONDUCTOR SOLAR CELL AND MANUFACTURE THEREOF



ABSTRACT : PURPOSE: To prevent a decrease in a conversion efficiency of a reliability test by mixing at least one type of Ni, Z, Sn and Au with Ag to be used as a metal layer.

CONSTITUTION: An alloy metal layer 102, a transparent conductive layer 103 and a semiconductor layer 104 are sequentially laminated on a conductive substrate 101. A transparent electrode layer of 800 \AA is deposited on the layer 104 by a resistance heating depositing method, and a condensing electrode 109 of 1 μm is formed thereon by an EB depositing method. In this case, the layer 102 is formed by using a target containing 93% of Ag+5% of Zn+2% of Ni and sputtering by a DC sputtering method. 2% to less than 30% of Ni, 5% to less than 30% of Zn and 3% to less than 22% of Sn and 3% or more of Au are mixed with the Ag, thereby obtaining a solar cell having a high efficiency and high reliability.

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